

REMARKS

Applicant has carefully reviewed the rejections set forth in the Office Action, and the following remarks are offered in consideration thereof. In this response, claims 32-37 have been cancelled without prejudice, claims 40, 49 have been amended to correct a minor typographical error, and new claims 56-59 added. Claims 38-59 now remain pending. Claims set showing amendments to claims is enclosed with this response.

Rejections under 35 U.S.C. 102

The Office Action rejected claims 32-41, 44, 47-49, 51 and 53 under 35 U.S.C. 102(b) as being unpatentable by U.S. Patent No. 5,412,416 to Nemirofsky ("Nemirofsky"). The rejection is respectfully traversed for the following reasons:

Alphanumeric characters and/or other image data unique to particular subset(s) of the remote sites is otherwise transmitted by the Applicant (e.g., a digital data communication link with error correction) to respectively corresponding remote stations. In response to command codes broadcast to all remote sites via a non-displayed portion of the broadcast television signal, each remote site can be controlled to itself locally convert earlier received alphanumeric characters and/or image data to local visual material that is then locally overlaid synchronously onto a continuing general broadcast television signal. The success or failure of these local remote activities is subsequently reported back to the central site.

By contrast, Nemirofsky distributes plural video segments and control signals over separate channels and then re-assembles them locally to generate a locally customized composite

video signal. There is no overlaying of locally generated alphanumeric/graphic vision materials onto a continuing un-interrupted broadcast television signal. It is literally impossible for Nemirofsky to anticipate even claim 38 – let alone more detailed claims. For example, see claim 41 which requires command codes to be transmitted by use of a vertical blanking interval and/or hex numbered pages of teletext transmission. Where is there any conceivable teaching of this in Nemirofsky?

Nemirofsky provides a distribution network for full motion video media, usually in the form of advertisements, allowing video programs to be transmitted from a distribution center (DC) to a multitude of receiving sites (RS), typically retail stores, dispersed over a wide geographic area. Television monitors (14) located at selected points in the receiving sites display the programs to an audience (shoppers in the course of shopping). Specifically, Nemirofsky provides for "customizing" video programs for particular target audiences or markets, such that the series of programs played in one receiving site could be quite different from that played in another. The distribution network provides automatic insertion of custom, store-specific video segments (22) into a general, network-wide video program (20) without the need for operational involvement of personnel at the receiving site (RS) through the use of control data encoded into the video signal at the distribution center (DC). An insertion control unit (56) at each receiving site (RS) reads the control data and switches a receiver (54) among channels carrying the network-wide program (20) and market specific segments (22) according to the control data.

The present invention as in claim 38 relates to a TV broadcast method for a system operated from a TV continuity studio..., comprising , *inter-alia*, the steps of

(i) *generating alphanumeric characters and/or image data separately for each of plural remote sites at a central site and transmitting the alphanumeric characters and/or image data to the plural remote sites via a digital data communication link;*

(ii) *detecting whether the alphanumeric characters and/or image data have been received correctly at the remote sites via the link;*

(iii) *generating and transmitting command codes within non-displayed portions of broadcast television signals...;*

(iv) *converting the alphanumeric characters and/or image data to local vision materials with a graphic generator at each of the remote sites;*

(v) *at each remote site, overlaying the local vision material synchronously onto the continuing general television signal without cutting off the main general broadcast; and*

(vi) *detecting whether the local vision materials have been broadcast via transmission of digital information sent back to the central site.*

Nemirofsky is not related to a TV broadcast system and method. Instead, it relates to a video media distribution network apparatus and method where programs can be only viewed in the particular chains of stores where they are delivered. On the other hand, the system of the claimed invention can be viewed as long as the viewers tune to the TV station to which the system units are coupled, and the system operates during TV broadcasts from a TV continuity studio. The distribution center of Nemirofsky is not located within a TV continuity studio, and therefore, the broadcast flow unit of the claimed invention is not found in Nemirofsky to operate its distribution center. Thus, at least for these reasons alone, there can be no anticipation as every element of the claim is not identical.

Moreover, in Nemirofsky, the market specific segments are transmitted to each of a plurality of receiving sites from the distribution center. The market specific segments (promotional advertisements, commercial advertising, sports, news, etc.) are received in the distribution center and then merely transmitted to a plurality of receiving sites – there is no generation of promotional advertisements, etc. in the distribution center. Nemirofsky fails to teach or suggest "generating alphanumeric characters and/or image data ...at a central site..." as recited in claim 38 of the present invention. Figure 2 and the related disclosure on pages 6-7 of the present specification provide support to this claimed feature.

In the present invention as in claim 38, methods and components characterizing images that are overlaid on the main television broadcast image are presented as alphanumeric characters and or/image data, and therefore there is a need for the step of converting the alphanumeric characters and/or image data to local vision materials These steps of transmitting information which characterizes the broadcasts and then converts the characterized information to local vision materials is neither disclosed nor suggested by Nemirofsky.

Even if Nemirofsky's distribution center is considered as a "central site" for argument sake, since Nemirofsky receives market segment data directly in the form of advertisements, news, sports, etc. and merely forwards them to a plurality of remote sites, there appears to be no generation of alphanumeric characters and/or image data at the central site. Since Nemirofsky does not generate alphanumeric characters and/or image data the central site, it is logical to conclude that it fails to detect "whether the alphanumeric characters and/or image data have been

received correctly at the remote sites via the digital communication link." Therefore, for at least this reason alone, the claimed invention is not anticipated by Nemirofsky, and therefore is patentably distinct over prior art of record. Applicant, therefore, respectfully requests that the rejection of claim 38 and its dependent claims be withdrawn and that they be passed to allowance.

Further, claim 38 requires "generating and transmitting command codes within non-displayed portions of broadcast television signals to remotely control each of the remote sites from the central site." Applicant has carefully reviewed col. 6, lines 46-65 of Nemirofsky as directed by the Office Action and respectfully notes that this disclosure of Nemirofsky fails to teach or suggest the claimed recitation as in claim 38 of the present invention.

For example, Nemirofsky does not involve transmitting any auxiliary information within non-displayed portions (e.g., VBI) of broadcast television signals. Furthermore, the Nemirofsky "control data" sent on another separate channel are not even comparable to the command codes of applicant's rejected claims.

In this regard, Applicant also respectfully requests the Examiner to note the difference between the control codes of Nemirofsky and the alphanumeric characters and/or image data of the claimed invention (which, like Nemirofsky's control data is sent over a separate channel). The control data of Nemirofsky et al. contain the control commands for the operation of its own units, whereas the applicant's alphanumeric characters and/or image data contain data characterizing the material to be displayed by the remote receiving sites (that will be overlaid on

the continuing general broadcast of a particular TV station) in the forms of subtitles, frames, and graphic animations.

Specifically, col. 6, lines 46 + of Nemirofsky disclose that "...in analog embodiment, an uplink modulator 40 receives the network wide program and market-specific segment signals and modulates them to a frequency appropriate for satellite transmission.... Encoder/modulator 40 transfer the network wide program 20 onto one digital source channel, while the market-specific segments are transferred onto one or more additional digital source channels. Preferably, a digital source channel separate from those used for the network-wide program 20 and market specific segments is reserved for control data. See col. 7, lines 1-10 of Nemirofsky. Thus, the network-wide programs, the market specific programs and the control data are each transmitted on different communication channels, while claim 38 of the present invention requires that the control data be transmitted in non-displayed portions of broadcast television signals, i.e., within the same channel. The disclosure at least on page 8, lines 15-40, page 9, lines 1-10 of the present specification provides further support to this claimed feature. Thus, there can be no anticipation.

Furthermore, claim 38 of the present invention requires "converting the alphanumeric characters and/or image data to local vision materials with a graphic generator at each of the remote sites." Col. 11, lines 4-12 of Nemirofsky fails to teach or suggest this limitation. Specifically, Nemirofsky requires that "...each unique program channel occupies a discrete portion of the transmission signal, and remain identifiable. Televisions 80 in the receiving site are tuned to receive the cable transmission channel, and may be switched to display a particular cable program channel among those transmitted over the transmission channel." Thus,

Nemirofsky does nothing more than conventional switching from one channel to another by tuning to a specific channel. Applicant respectfully submits that it is not clear as to how this portion of Nemirofsky is allegedly being applied to the recitations of claim 38 of the present invention. In view of the above, Applicant respectfully submits that claim 38 is neither anticipated nor rendered obvious over prior art of record.

Also, claim 38 of the present invention requires "*at each remote site, overlaying the local vision material synchronously onto television broadcast signals without cutting off the television broadcast signals*". The Office Action asserts that col. 11, lines 13-63 of Nemirofsky teaches the above recited feature. Applicant respectfully disagrees. Col. 11, lines 11-45 merely discloses reassembling market specific segments to suit individual retail chains, stores, etc. Nemirofsky provides for customizing video programs for particular target audiences or markets, such that the series of programs played in one receiving site could be quite different from that played in another location. The distribution network provides automatic insertion of custom, store-specific video segments (22) into a general, network-wide video program (20).... The insertion control unit (56) at each receiving site (RS) reads the control data and switches a receiver (54) among channels carrying the network-wide program and market specific segments according to the control data. See the Abstract. Col. 11, lines 13-63 further extrapolate this concept. The following example is provided to further clarify this point recited in claim 38 of the present invention:

Assume that viewers of a particular TV channel can watch different messages in different local units, during the continuing broadcast. In other words, viewers in Washington DC view an administrative announcement, concerning Washington DC only (this message is broadcast in Washington DC only); while viewers of the same channel, in New York City, at the same time view an administrative announcement, concerning New York City only (this message is broadcast in New York City only) on the same TV channel, while watching a

particular program, by means of subtitles, graphics, animation, and frames, on a specific area of the screen upon continuing broadcast, without cutting the main broadcast.

However, in Nemirofsky, the network-wide program is interrupted/cut upon selecting a market specific segment, and therefore, there is no overlay of local vision material synchronously onto the continuing general television signals without cutting off the main general broadcast as required by claim 38 of the present invention. Since Nemirofsky interrupts/cuts off the network-wide program which is further evident in view of the switching the receiver 54 among channels so as to select the market specific segment instead of the network-wide program, Nemirofsky teaches away from the present invention as in claim 38. Therefore, Nemirofsky does not anticipate the claimed invention. In view of the above, Applicant respectfully urges that the rejection of claim 38 and its dependent claims (39-46) be withdrawn and that they be passed to allowance.

Applicant's arguments as above with respect to claim 38 are equally applicable to claim 47. Therefore, Applicant respectfully submits that claim 47 and its dependent claims are also allowable. New claims 56-59 include limitations recited in claim 38 and are therefore in condition for allowance.

Rejections under 35 U.S.C. 103

Claims 42 and 50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of U.S. Patent No. 4,829,569 to Seth-Smith ("Seth-Smith"). The rejection is respectfully traversed.

Claim 42 depends from independent claim 38 and claim 50 depends from independent claim 47. Claims 42 and 50 require added limitations of *inter-alia* decoding of teletext. The Examiner alleges this would be similar to Nemirofsky's alleged decoding of commands received via the VBI...citing to Nemirofsky's Figure 3, host computer 70 and col. 10, lines 45-58. However, the undersigned can not find any such alleged features at the cited portions of Nemirofsky. Where, for example, is the VBI even mention at col. 10, lines 45-58?

The Examiner's attempt to modify Nemirofsky with Seth-Smith is also clearly erroneous merely because Nemirofsky could have done things differently does not constitute any suggestion or motivation to do so. the Examiner's attempt to use hindsight to support a manufactured after the fact suggestion is simply inappropriate.

Claims 43, 45, 46, 52 and 54-55 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of U.S. Patent No. 4,694,490 to Harvey ("Harvey"). Claims 43, 45, 46 depend from independent claim 38 and claims 52, 54-55 depend from independent claim 47. Claims 43 and 52 require added limitations of *inter-alia* command codes from the central managing and controlling site act to control functions, switches between general or..., reports of a control process...; starts, stop, differentiation of one or more process, and the Office Action alleges that this would be similar to Nemirofsky's disclosure of performing multiple tasks. Applicant respectfully disagrees.

As noted above with respect to claim 38, Applicants have clearly set forth that Nemirofsky fails to teach or suggest all the requirements of claim 38 of the present invention.

Harvey fails to teach or suggest what is missing from Nemirofsky. Harvey relates to an apparatus and method for automatically controlling programming transmission and monitoring the programming transmitted and presented. Neither Nemirofsky not Harvey, alone or in combination, teach or suggest all the requirements of claim 38.

Claim 43 adds further limitations to claim 38. As in claim 43 of the present invention, the switching between general or differential transmission to a corresponding broadcast area from a storage medium for still or moving character and/or image data to a display producing area in a remote site is performing by taking the alphanumeric characters and/or image data from the storage area and bringing them to the broadcast are for display. It is not possible for Nemirofsky to have such a function at the remote site unit as it does not produce subtitles, frames, graphic animations, etc. to be overlaid with a general broadcast signal. The system of Nemirofsky switches between the transmission channels that carry full motion media to be displayed in the retail stores, etc.

Furthermore, since the central site in Nemirofsky is not even in the TV continuity studio of a TV broadcast station, it appears that the control processes are handled differently. Although Nemirofsky discloses performing multiple tasks, those tasks are performed to control it's own insertion control unit which is neither found nor needed by the claimed invention. Also, Harvey merely discloses that it's data recorders are adapted to output data to remote sites on predetermined instructions, and that the methods coordinate and instruct equipment in the transmission and presentation of radio and television programming.... There is no teaching or suggestion that control codes are transmitted within non-displayed portions of broadcast

television signals to remotely control each of the remote sites from a central site, and that the control codes are used to start, stop, differentiate one or more process as required by claim 43 of the present invention.

Merely stating that it would have been obvious to one of skilled in the art to modify Nemirofsky with the teachings of Harvey does not meet the requirements of obviousness as there must be some suggestion or motivation for the modification of the references. Even assuming *arugendo* that it would have been obvious to a person of ordinary skill in the art that Nemirofsky may be modified by integrating predetermined instruction in the control data, as taught by Harvey, so that "broadcast transmission facility can duplicate the operation of a television studio..." does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

Claim 45-46 depend from claim 38 and further limits claim 38 in a patentable sense. Since Nemirofsky fails to teach or suggest all the requirements of claim 38, claims 45-46 which further limit claim 38 are deemed to be allowable. Likewise, claims 52, 54-55 depend from independent claim 47. Neither Nemirofsky nor Harvey, alone or in combination, teach or suggest all the requirements of independent claim 47. Therefore, claims 52, 54-55 further limit claim 47 in a patentable sense and are therefore allowable. In view of the above, Applicant respectfully request that the rejection of claims 43, 45-46, 52, 54-55 be withdrawn and that they be passed to allowance.

Accordingly, a notice of allowance is respectfully solicited.

ARAS
Serial No. 09/331,756

Respectfully submitted,

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Serial No. 09/331,756



VERSION SHOWING CLAIM AMENDMENTS

40. (Amended)

A TV broadcast method as in claim 38 further including:

[(g)](i) controlling and verifying whether the data present at the [control]central site and sent to remote stations have been received correctly by using a modem.

49. (Amended) A TV broadcast system as in claim 47 further including:

(g) means for controlling and verifying whether the data present at the [control]central site and sent to remote stations have been received correctly by using a modem.